

Title (en)
CLOSED-CYCLE CONDENSER DRYER WITH HEAT REGENERATION

Title (de)
KONDENSATIONSTROCKNER MIT GESCHLOSSENEM KREISLAUF UND WÄRMERÜCKFÜHRUNG

Title (fr)
SÈCHE-LINGE À CONDENSATION À CYCLE FERMÉ AVEC RÉGÉNÉRATION THERMIQUE

Publication
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Application
EP 15760660 A 20150210

Priority

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Abstract (en)
[origin: WO2015136393A1] A drying apparatus (20) includes a compartment (24) for containing objects (28) to be dried, a closed-loop air pathway and a regeneration heat exchanger (44). The closed-loop air pathway includes a cooling element (60) and a heating element (52, 72), and is configured to extract from the compartment air (40) that includes moisture in the form of vapor, to evacuate heat energy from the extracted air to an external fluid flow (84, 86) by cooling using the cooling element so as to remove at least some of the moisture from the air, to reheat the air using the heating element, and to re-introduce the reheated air (76) into the compartment. The regeneration heat exchanger is inserted in the closed-loop air pathway and is configured to transfer heat from the air (40) extracted from the compartment to the air (64) exiting the cooling element in the closed-loop air pathway.

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